PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-238692

(43) Date of publication of application: 31.08.1999

(51)Int.CI.

H01L 21/26 H01L 21/268 H01L 33/00 H01S 3/18

(21)Application number: 10-039462

23.02.1998

(71)Applicant: NICHIA CHEM IND LTD

08.02.2001

(72)Inventor: NAKAMURA SHUJI

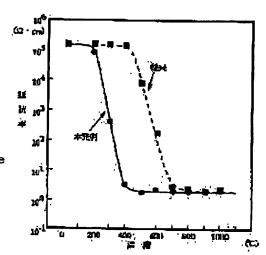
KAMIURA YOICHI

(54) METHOD OF LOWERING RESISTANCE OF SEMICONDUCTOR NITRIDE

(57) Abstract:

(22)Date of filing:

PROBLEM TO BE SOLVED: To provide a new technology which is more advanced compared to the prior technologies, capable of lowering a resistance of semiconductor nitride doped by a p-type impurity. SOLUTION: This method of lowering the resistance comprises a first process for growing a semiconductor nitride doped by a p-type impurity and then irradiating with electromagnetic waves including an energy of not less than the bandgap energy of the semiconductor nitride, and a second process for providing a heat treatment to the semiconductor nitride in an atmosphere substantially containing no activated hydrogen. By dissolving hydrogen bonding p-type impurity dissociated by providing electrons to the semiconductor nitride with electromagnetic wave irradiation, the resistance of the semiconductor nitride is lowered.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection?

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]